

REMARKS

Claims 1 – 6, 9 and 10 are currently pending. A final Office Action was mailed on January 7, 2005. Applicants cancel claims 6, 9 and 10 without prejudice or disclaimer, and amend claims 2 and 3. No new matter is added.

REJECTION UNDER 35 U.S.C. §112

Claims 2 and 3 are rejected under the second paragraph of 35 U.S.C. § 112 as being indefinite. Specifically, the Examiner suggests that the phrase 20 (50) times “or more” renders the claims indefinite because an upper level on this relative measure is unclear. Applicants amend claims 2 and 3 to recite that the claim relative difference in resistivity between the silicon substrate and the silicon layer is between 20 (50) times and 100 times. This amendment is supported by Applicants’ specification at page 8, lines 10 - 12 (indicating that the silicon substrate may have a resistivity of 1000 Ω -cm) and at lines 18 – 21 (indicating that the silicon layer may have a resistivity of 10 Ω -cm). Accordingly, Applicants respectfully request that the rejection under the second paragraph of 35 U.S.C. § 112 be withdrawn.

REJECTION UNDER 35 U.S.C. §103(a)

Claims 1 - 4 rejected under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent No. 6,239,465 to Nakagawa. Claims 5 is rejected under 35 U.S.C. §103(a) as being unpatentable over Nakagawa in view of Applicants’ admitted prior art (AAPA). Claims 6 and 9 are rejected under 35 U.S.C. §103(a) as being unpatentable over Nakagawa in view of U.S. Patent No. 5,620,910 to Teramoto. Claim 10 is rejected under 35 U.S.C. §103(a) as being unpatentable over Nakagawa in view of Teramoto and AAPA. Applicants cancel claims 6, 9 and 10 without prejudice or disclaimer, and respectfully traverse the rejections as to claims 1 – 5.

In independent claim 1, Applicants disclose:

1. A semiconductor integrated circuit, comprising:

a silicon substrate;

a silicon layer that is formed on the surface of said silicon substrate and has a lower resistivity than the resistivity of said silicon substrate;

first and second circuit sections formed in said silicon layer; and

a device isolation region projecting from said silicon substrate up to a surface of each of said first and second circuit sections between said first and second circuit sections.

(Emphasis added)

In regard to independent claim 1, the Examiner alleges that the epitaxial layer 25 in Fig. 5 of Nakagawa is the equivalent of the silicon layer formed on the surface of the substrate, and that silicon substrate 21 in Figure 5 of Nakagawa is the equivalent of the silicon substrate claimed in independent claim 1, except for the differing materials of glass and substrate.

Applicants respectfully disagree with the Examiner's attempt to equate the silicon layer formed on the surface of the substrate, as claimed in claims 1, with epitaxial layer 25 as illustrated by Fig. 5 of Nakagawa. Epitaxial layer 25 is not formed on the surface of the silicon substrate 21, said to be equivalent to the substrate of the claims. Instead, epitaxial layer 25 is formed on the surface of n + diffusion layer 24, which intervenes between epitaxial layer 25 and silicon substrate 21, (see, e.g., column 4, lines 50-52; and Figs. 4B, 5 of Nakagawa).

Accordingly, Applicants respectfully submit that independent claim 1 is not made obvious by Nakagawa, and that independent claim 1 is therefore in condition for allowance. As dependent claims 2 – 5 each depend from independent claim 1, Applicants further submit that dependent claims 2 – 5 are also allowable for at least this reason.

CLOSING

An earnest effort has been made to be fully responsive to the Examiner's objections. In view of the above amendments and remarks, it is believed that independent claim 1 is in condition for allowance, as well as those claims dependent therefrom. Passage of this case to allowance is earnestly solicited.

However, if for any reason the Examiner should consider this application not to be in condition for allowance, he is respectfully requested to telephone the undersigned attorney at the number listed below prior to issuing a further Action.

Any fee due with this paper may be charged on Deposit Account 50-1290.

Respectfully submitted,



Thomas J. Bean
Reg. No. 44,328

CUSTOMER NO.: 026304
TELEPHONE NO.: (212) 940-8729
FAX NO.: (212) 940-8986/7
ATTORNEY DOCKET NO.: 100806-00237 (NECF 20.702)
TJB:fd